

ABSTRACT OF THE DISCLOSURE

5 Halogen-containing polymer compositions comprising a latent
mercaptan-containing heat stabilizer composition substantially
free from the offensive odor typically associated with mercaptans
are protected during processing by the degradation products of
the latent (i.e., blocked) mercaptan which include a free
10 mercaptan. Other products of the degradation are believed to
include carbocations of the blocking moiety which are stabilized
by a molecular structure in which the electron deficiency is
shared by several groups. The latent mercaptan may be the sole
heat stabilizer additive but the free mercaptan released during
15 processing may also synergize the activity of metal-based heat
stabilizers such as metal salts and organometallic stabilizers
such as organotin carboxylates and mercaptides in the polymer
composition. The odor of primary mercaptan-containing heat
stabilizers in halogenated polymer compositions is masked by a
20 small amount of a latent mercaptan. The latent mercaptans also
serve as intermediates in the preparation of anti-oxidants, anti-
microbial agents, photostabilizers, and primary heat stabilizers.
Highly effective heat stabilizers are prepared by the
condensation of formaldehyde and a para-phenol and further
condensation of the crude product with a mercapto-containing
25 compound.